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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,620	01/30/2006	Matthias Winkel	ZAHFRI815US	7373
20210 7590 01/05/2010 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301				
EXAMINER LE, DAVID D				
ART UNIT 3655		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,620

Applicant(s)

WINKEL ET AL.

Examiner

DAVID D. LE

Art Unit

3655

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-32 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-32 and 34-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is the fifth Office action on the merits of Application No. 10/566,620, filed on 30 January 2006. Claims 23-32 and 34-36 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - Copy of Foreign Priority Document, received on 01/30/06
 - Information Disclosure Statement, received on 01/30/06

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 September 2009 has been entered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 23-32 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23:

- Line 2 recites the limitation "the drive engine". There is insufficient antecedent basis for this limitation in the claim.
- Lines 7 and 10 recite the limitation "the vehicle drive motor". There is insufficient antecedent basis for this limitation in the claim.

Claim 24:

The method step, as recited in claim 24, appears to be in conflict with the method step b1 of claim 23, which requires the clutch to be engaged.

Claim 26:

- Line 2 recites the limitation "positive drive torque". It is unclear whether this newly recited limitation "positive drive torque" is different from the one, which is first mentioned on line 4 of claim 24.

Claim 27:

- Lines 2 and 4 recite the limitation "positive drive torque". It is unclear whether this newly recited limitation "positive drive torque" is different from the one, which is first mentioned on line 4 of claim 24.

Claim 28:

- Line 3 recites the limitation “positive drive torque”. It is unclear whether this newly recited limitation “positive drive torque” is different from the one, which is first mentioned on line 4 of claim 24.
- Lines 3-4 also recite the limitation “two or more of named indicators or other indicators in common”. It is unclear which named indicator/other indicators in common that the claimed limitation is referring to.

Claim 30:

The method step, as recited in claim 30, appears to be in conflict with the method step b1 of claim 23, which already requires the clutch to be engaged.

Claim 31:

The method step, as recited in claim 31, appears to be in conflict with the method step b1 of claim 23, which requires the clutch to be engaged.

Claim 32:

The method step, as recited in claim 32, appears to be in conflict with the method steps b1 and b2 of claim 23, which already requires the downshifting operation to be terminated.

Claim 34:

- The method steps c, d1 and d2 appear to be in conflict with the method step b2.
- Lines 29-30 recite the limitation "a predetermined threshold speed". It is unclear whether this newly recited limitation is different from the one, which is first recited on line 13 of claim 34.
- Lines 37-38 recite the method step of "terminating the second downshifting operation by engaging the clutch". It is unclear whether this method step is different from the one, which is first recited on lines 27-28 of claim 34.

Claim 36:

- Line 4 recites the limitation "a transmission". It is unclear whether this transmission is different from the one, which is first recited on lines 1-2 of claim 36.
- Line 30 recites the limitation "a predetermined threshold speed". It is unclear whether this predetermined threshold speed is different from the one, which is first recited on line 10 of claim 36.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23-32 and 34-36, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,231,474 to Hawarden et al. (hereinafter referred to as Hawarden) in view of applicant's admission of prior art, present specification, paragraphs [005] – [014].

Claims 23-32-34-36:

Hawarden (Figs. 1-3B; column 1, line 60 – column 4, line 67) discloses an automated transmission downshift control comprising the steps of:

- Carrying out a first downshifting operation during a coasting mode (i.e., column 4, lines 35-37) of the automatic transmission (i.e., Fig. 1, element 14) from a higher gear to a lower gear (i.e., column 3, line 4 – column 4, line 67);
- Disengaging a clutch (i.e., Fig. 1, element 16) located between the automatic transmission and a vehicle engine (i.e., Fig. 1, element 12);
- Terminating the first downshifting operation by engaging the clutch located between the automatic transmission and the vehicle engine so that engine compression influences the vehicle (i.e., column 3, line 4 – column 4, line 67);
- If the vehicle falls below a threshold speed, carrying out a second downshifting operation of the automatic transmission (i.e., column 3, line 66 - column 4, line 9);
- Disengaging the clutch located between the automatic transmission and the vehicle engine (i.e., column 3, line 4 – column 4, line 67);
- Downshifting from the lower gear to a first next lower gear in the automatic transmission and subsequently downshifting from the first next lower gear to a

second next lower gear while maintaining the clutch, located between the automatic transmission and the vehicle engine, disengaged during the second downshifting operation (i.e., column 3, line 4 – column 4, line 67);

- Determining a driver desire for positive drive torque (i.e., column 3, line 4 – column 4, line 67);
- Terminating the second downshifting operation by engaging the clutch (i.e., column 3, line 4 – column 4, line 67);
- Preventing the second downshifting operation if operational brakes are activated (i.e., column 3, line 4 – column 4, line 67);
- Wherein the step of determining the driver desire for positive torque by identifying at least one of:
 - Releasing operative brakes;
 - Deflecting an activation lever for a direction of travel;
 - A predetermined steering angle of a vehicle steering mechanism; and
 - Activating of a power control member (i.e., column 3, line 4 – column 4, line 67).

Hawarden, however, does not explicitly state that the first downshifting operation is carrying out during a coasting mode without any engine braking.

Applicant's admission of prior art (present specification, paragraphs [005] – [014]) discloses:

- A method of operating an automatic transmission of a motor vehicle having a clutch located between a driving engine and the transmission;
- Wherein a downshifting operation is carrying out during a coasting mode without any engine braking of the vehicle (i.e., paragraphs [006] - [012] of the present specification, the starting clutch is *opened* during the downshifting operation and the starting clutch is closed at the completion or the end of the downshifting operation; and therefore, the engine braking does not occur during the process of downshifting operation in coasting mode).

Since all the claimed elements were known in the prior art, one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Response to Arguments

8. Applicant's arguments with respect to claims 23-32 and 34-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID D. LE whose telephone number is (571)272-7092. The examiner can normally be reached on Mon-Fri (0900-1730).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David D. Le can be reached on 571-272-7092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Le/
Primary Examiner, Art Unit 3655
01/04/2010

ddl